Location ID: <u>BLM-17-550</u> Field I	Representative(s): D. Menzie
Date Started: <u>08/10/90</u>	Date Completed: 09/10/90
Northing: <u>227659.43</u>	Easting: 403018.75
Brass Cap: 4538.24 Outer Casing:	4539.69 Inner Casing: 4540.27
Drilling Method: Mud Rotary 0'-70' Air-foam Rotary 70'-600' Driller: J. Gower	Drilling Contractor: <u>Larjon Drilling Co.</u>
Total Depth Borehole: 600'	Total Depth Well Casing: <u>566.17</u>
Total Depth Surface Casing: 70'	
Diameter Well Casing: 4"	Diameter Surface Casing:10"
Length of Bottom Blank: 5.31'	1
Type of Screen: extra strength	0.02 slot
Screen Interval: <u>550.44</u> to <u>560.86</u>	
Water First Detected: 560'	Water Level Open Borehole: 461.64' TSC
Water Level Cased Borehole: 469.16*TOC 09/13/90	
Quik-Foam Use: 5 gallons	
Estimated Water Use: 7,800 gallons	
Well Casing:	
4in x 3ft SCD 40 PVC: 4in x 5ft SCD 40 PVC: 4in x 10ft SCD 40 PVC: 4in x 20ft SCD 40 PVC: Total SCD 40 PVC pipe: ft	stock SS centralizers: custom SS centralizers: yes 4"x2' SS locking riser: 1 x 2' 4" SS locking cap: 1 4" SS female cap: 1 ASTM male adaptor: 2 Johnson male adaptor: 1
4in x 3ft SCD 5 SS pipe: 4in x 5ft SCD 5 SS pipe: 4in x 10ft SCD 5 SS pipe: 4in x 20ft SCD 5 SS pipe: 19 x 20 ft Total SCD 5 SS pipe: 380 ft	4in x 5ft SCD 10 SS pipe: 1 x 5 ft 4in x 10ft SCD 10 SS pipe: 1 x 10 ft 4in x 20ft SCD 10 SS pipe: 8 x 20 ft Total SCD 10 SS pipe: 175 ft

Well Completion:

100# bags 16/40 sand: 19 bags 100# bags 10/20 sand:

bags

100# bags 8/14 sand: bags 100# bags 8/20 sand: 24 3/4 bags

94# bags cement: 170 bags

5 gal. buckets bentonite: buckets

50# bentonite powder: 18 bags

1/2 Benseal: bags

Surface Casing:

94# bags cement: 35 bags

50# bags bentonite powder: 4 bags

Grout: bags

Pertinent Field Notes:

08/10/90 Finish setting up, drilled mud rotary (7 7/8" mill tooth bit) pilot hole 0'-70', used

1,400 gallons water. - Menzie

08/13/90 Ream pilot hole to 16" from 0'-55', mud pump failed, used 1,000 gallons water. -

Menzie

Mud pump fixed, finish reaming hole to 70', used 400 gallons water, ran surface 08/14/90

casing, poured grout. - Menzie

Demobilize Frank's rig and mobilize BE Rig. - Menzie 08/15/90

Drilled Air Foam Rotary (9 7/8" mill tooth bit) from 70'-390', used 2,500 gallons 08/16/90

water. - Menzie

08/17/90 Drilled Air Foam Rotary (9 7/8" mill tooth bit) from 390'-600', detected formation

water at 560', detected andesite bedrock at 585', used 2,500 gallons water. - Menzie

08/20/90 Sounded bottom at 563.5', measured water level at 461.64', run ss casing and begin

installing gravel pack. - Menzie

08/21/90 Finish installing gravel pack and pump benseal plug. - Menzie

08/22/90	Finish installing filter sand to 10' above water level in annulus and pour first load of grout. Bailed well with no indication of grout invasion Menzie
08/23/90	Pour second load of grout Menzie
08/24/90	Surge and bail for development, see development sheet for details Menzie
08/30/90	Install pump for development, see development sheet for details Contaldo
09/10/90	Well developed and pump removed Menzie